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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/882,123

06/15/2001

David P. Huang

1880

8640

35157

7590

06/30/2003

NATIONAL STARCH AND CHEMICAL COMPANY

P.O. BOX 6500

BRIDGEWATER, NJ 08807-3300

EXAMINER

TRAN LIEN, THUY

ART UNIT

PAPER NUMBER

1761

DATE MAILED: 06/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/882,123

Applicant(s)

Huang et al

Examiner

Lien Tran

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 16, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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1. The 112 second paragraph and 101 rejections of claims 6-7 are maintained for the same reason set forth in paragraphs 1-2 of the previous office action. While claims 6-7 are amended, the claims are still “use of” claims and the rejections are still applicable.
2. Claims 2-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al (4207355) in view of Mizoguchi et al.

Chiu et al disclose cold-water dispersible, gelling starches. The starches are prepared using converted/crosslinked starches. The starch is cross-linked by forming a slurry of starch in water. After the crosslinking reaction is complete, the pH of the reaction mixture is adjusted to 5.5-6.5 and the crosslinked product be drum dried directly to obtain pregelatinized starch. After drying, the starch product is removed from the drum drier in sheet form and then pulverized to a powder. Alternatively, the product may be reduced to flake form. Starch such as tapioca can be used. (See columns 2-3, 5)

Chiu et al do not disclose the properties as claimed and using the starches in dough products, dough having the properties as claimed and the concentration of starch..

Mizoguchi et al disclose processed starch and its use in bakery foods prepared from dough. (See column 2)

While Chiu et al do not disclose the properties of the starch as claimed, the starch disclosed is prepared by the same process as disclosed in the instant specification; thus, it is obvious the starch will have the same properties as claimed. The specification discloses converted and crosslinked starches can be used. The pH of the starch is adjusted to within the

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level disclosed in the specification and the starch is then drum dried which is the same step disclosed in the specification. Chiu et al do not disclose using the starch in a dough; however, it is known in the art to use processed starch in dough products as shown by Mizoguchi et al. Thus, it would have been obvious to one skilled in the art to use the Chiu et al starch in dough products. When the Chiu et al starch is added to dough, it is obvious the dough will have the properties as claimed because the same starch is used. Since the starch has gelling property, it is obvious it can function as a binder because gelling agent is commonly used to bind food ingredients. It would also have been obvious to use any other starch including sago and potato when it is desired to transform such starches into cold-water dispersible, gelling starches. It would also have been obvious to use any concentration of starch depending on the quantity desired.

3. In the response filed April 16, 2003, applicant argues neither Chiu nor Mizoguchi teach or suggest the properties of the starch as claimed. It is recognized that Chiu does not disclose the properties as claimed. However, it is the examiner's position that the starch disclosed by Chiu inherently has the same properties as claimed because the starch is processed in the same way as the claimed starch and applicant does not seem to dispute this position. Applicant also argues Chiu does not teach or suggest the use of its starch in baked or fried products. This argument is not persuasive. Chiu discloses the starch is particularly suited for use in pie, cream fillings, puddings, spread, jellies and instant mixes; however, Chiu does not disclose that these products are the only products the starch can be used. It is well known starch is used in a variety of product and Mizoguchi et al teach using processed starch in baked product. It would

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have been obvious to use the Chiu product in other product including baked product when the properties provided by the starch is desired in such product. Applicant directs the examiner's attention to example 4 where it is shown crosslinked starches do not perform as well as the starches claimed. The starches shown in example 4 is not the starches disclosed by Chiu. The Chiu starch is not only crosslinked; the starch is treated by pH adjustment and is then drum dried. This is the same treatment as disclosed in the specification for the claimed starch.

4. Applicant's arguments filed April 16, 2003 have been fully considered but they are not persuasive.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien Tran whose telephone number is 703-308-1868. The examiner can

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normally be reached on Wed-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

June 26, 2003


LIEN TRAN
PRIMARY EXAMINER
Group 1700